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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,795	10/19/2001	Markus Schetelig	1117.40738X00	6987

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EXAMINER
ZHENG, EVA Y

ART UNIT	PAPER NUMBER
2634	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10/19/01</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-11</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-3 and 5-11</u> is/are rejected.

7)☒ Claim(s) <u>4</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date <u>10/19/01</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Drawings

1.   Figure 1 should be designated by a legend such as --Prior Art-- because only

that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in

compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid

abandonment of the application. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

any portion of the drawing figures. If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in abeyance.

Specification

2.   The disclosure is objected to because of the following informalities: page 8, line

22-23, please insert the copending U.S patent applicant number instead of the

Attorney's Docket number.

        Appropriate correction is required.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

4.   Claims 7-11 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite because it defines within its confines both a distinct method and a distinct

apparatus. The claim as a whole is neither a definition of a method nor of an apparatus

but is instead a hybrid of the two.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6.   Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Vander

Mey (US 5,278,862)

a)   Regarding claim 1, Vander Mey discloses a method for data extraction from a

data stream containing at least one data packet (Col 3, L21-25), comprising the steps

of:

comparing a bit stream derived from a received digital data stream with an

expected bit sequence to determine a correlation value (CorrVa1) for detecting a data

packet (150 in Fig. 1B; Col 3, L34-38),

starting data extraction when the correlation value (CorrVa1) exceeds a threshold

value (CorrThres) indicating that a data packet has been detected (156 and 158 in Fig.

1B; Col 3, L 38-42),

continuing comparing the received bit stream with the expected bit sequence to

determine a new correlation value (CorrVal) (as shown in Fig. 1B), and

restarting data extraction when the new correlation value (CorrVa1) exceeds the

former correlation value (MaxCorrVa1) (as shown in Fig. 1B; Col 3, L21-45) .

b)   Regarding claim 2, Vander Mey discloses the method as claimed in claim 1,

wherein the threshold value (CorrVal) is a programmable value (Col 2, L11-20).

c)   Regarding claim 3, Vander Mey discloses the method as claimed in claim 1,

wherein the correlation value (Corr-Val) is stored as correlation value (MaxCorrVa1)

each time data extraction is started or restarted and the new correlation value (CorrVal)

continuousy determined after starting or restarting data extraction is compared with the

actually stored correlation value (MaxCorrVal) (as shown in Fig. 1B; Col 3, L21-45).

7.   Claims 1-3 and 5-8 are rejected under 35 U.S.C. 102(b) as being anticipated by

Vander Mey et al (US 5,359,625).

a)   Regarding claim 1, Vander Mey et al. disclose a method for data extraction from

a data stream containing at least one data packet, comprising the steps of:

comparing a bit stream derived from a received digital data stream (28 in Fig. 1)

with an expected bit sequence to determine a correlation value (CorrVa1) for detecting

a data packet (142 in Fig. 1),

starting data extraction when the correlation value (CorrVa1) exceeds a threshold

value (CorrThres) indicating that a data packet has been detected (44 and 46in Fig. 1;

Col 5, L 23-28),

continuing comparing the received bit stream with the expected bit sequence to

determine a new correlation value (CorrVal) (as shown in Fig. 1), and

restarting data extraction when the new correlation value (CorrVa1) exceeds the

former correlation value (MaxCorrVa1) (as shown in Fig. 1; Col 5, L10-31).

b)   Regarding claim 2, Vander Mey et al. disclose the method as claimed in claim 1,

wherein the threshold value (CorrVal) is a programmable value (Col 9, L43-57).

c)   Regarding claim 3, Vander Mey et al. disclose the method as claimed in claim 1,

wherein the correlation value (Corr-Val) is stored as correlation value (MaxCorrVa1)

each time data extraction is started or restarted and the new correlation value (CorrVal)

continuousy determined after starting or restarting data extraction is compared with the

actually stored correlation value (MaxCorrVal) (as shown in Fig. 1; Col 5, L10-31).

d)   Regarding claim 5, Vander Mey et al. disclose the method as claimed in claim 1.

wherein after detecting a data packet an initial timing estimate (InitTiming) (inherent as

sampling with a clock) is determined prior to starting data extraction that synchronizes

sampling of bits from a data stream for data extraction with data stream symbols (Col 5,

L 10-21).

e)   Regarding claim 6, Vander Mey et al. disclose the method as claimed in claim 5,

wherein the timing of the sample process is continously tracked by comparing the timing

of symbols within the oversampled bitstream with the actual timing of the sample

process and correcting the timing of the sample process if the deviation between the

timing of the sample process and the timing of symbols exceeds a certain value (Col 9,

L43-57).

f)   Regarding claim 7, Vander Mey et al. disclose a device for performing the method for data extraction from a data stream containing at least one data packet as claimed in claim 1, the device comprises:

data extraction unit for extracting data from a received data stream (44 in Fig. 1),

packet detector for comparing a bit stream derived from a received digital data stream with an expected bit sequence to determine a correlation value (CorrVal) (42 in Fig. 1), and

a sync-control module (46 in Fig. 1) receiving the correlation value (Corrval) from the packet detector that controls the data extraction unit for starting data extraction when the correlation value (Corrval) exceeds a threshold value (CorrThres) (Col 5, L10-31).

g)   Regarding claim 8, Vander Mey et al. disclose the device as claimed in claim 7. wherein the device further comprises an initial timing estimator (inherent as sampling with a clock) which receives the data stream for determining an initial timing estimate (InitTiming) prior to starting data extraction for synchronizing data extraction with data stream symbols, the initial timing estimate (InitTiming) is output to the sync-control module (46 in Fig. 1).

Allowable Subject Matter

8.   Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9.   Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Eva Yi Zheng whose telephone number is (571) 272-
3049. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number
for the organization where this application or proceeding is assigned is 703-879-9306.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the Technology Center 2600 Customer Service Office
whose telephone number is (703) 306-0377.

Eva Yi Zheng
Examiner
Art Unit 2634

March 10, 2004

SHUWANG LIU
PRIMARY EXAMINER